UNITED STATES PATENT AND TRADEMARK OFFICE

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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>05 February 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-16</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-16</u> is/are rejected.

7)☒ Claim(s) <u>10</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>30 August 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>07/07/2005</u>.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

Specification

1.   The attempt to incorporate subject matter into this application by reference to

"Methods and Apparatus for Data Caching to Improve Name Recognition in Large

Namespaces," assigned to a common assignee with the present invention is ineffective

because the proper US Patent Serial No. is not disclosed, and the appropriate location

of disclosure within the specification instead shows a blank space. The proper US

Patent Serial No. of this document should be fully disclosed in the specification.

2.   **Claim 10** is objected to because of the following informalities: the language of

claim 10 should read "...make changes to the results list based on in the user and

historical information.". Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   **Claims 1** is rejected under 35 U.S.C. 102(e) as being anticipated by US Patent

Application 2004/0034527 hereinafter referred to as Hennecke.

Regarding **claim 1**, Hennecke discloses a voice recognition system comprising:

- a plurality of voice activated modules for receiving voice recognition results representing voice inputs from a user (Page 1, paragraph 0015);

- a voice recognition module for receiving voice inputs from a user and preparing a list of voice recognition results, each of the voice recognition results representing a candidate for a result matching the voice input received by the user (Page 1, paragraphs 0009-0010; Fig. 1, items 6-8); and

- a results postprocessor for processing the list of voice recognition results to improve speed and accuracy of voice recognition (Fig. 1, item 7; Page 2, paragraph 0020; Page 3, paragraph 0028), the results postprocessor being operative to make changes to the list based on information relating to past results of recognition attempts (Page 2, paragraph 0020).

Claim Rejections - 35 USC § 103

4.   **Claims 1-2, 8-10,** and **12-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hennecke in view of UK Patent Application GB2375211, hereinafter referred to as Robinson, as disclosed in the admitted prior art.

Regarding **claim 1**, Hennecke discloses all limitations of the claim as above, but provides a nebulous description of the results postprocessor being operative to make

changes to the list based on information relating to past results (Page 2, paragraph 0020).

Robinson provides a more complete disclosure of a results list that is changeable based upon past results information (Page 18, line 32 - Page 19, line 4).

These references are combinable because they both teach a method of voice-control for a remote processor.

Robinson further provides motivation to combine in disclosing the need for custom-tailoring the voice recognition system to the particular speech patterns of the user to increase accuracy and reliability with repeated use (Page 12, lines 2-4; Page 12, lines 13-17).

Therefore, the examiner contends that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Hennecke using the teachings of Robinson to improve the recognition process by personalizing the system to individual users.

Regarding **claim 2**, Robinson further discloses making changes to the results list based on previously stored information relating to expected user actions (Abstract; Page 4, lines 4-6;Page 19, lines 12-15).

Regarding **claim 8**, Hennecke discloses a results postprocessor for voice recognition comprising:

- a repository of information affecting a current voice recognition attempt

(Fig. 1, item 4; Page 1, paragraph 0015; Page 2, paragraph 0020); and

- a processing module for processing voice recognition results in a result list

(Fig. 1, item 7; Page 2, paragraph 0020; Page 3, paragraph 0028).

Hennecke does not adequately disclose that said processing module is operative to examine information affecting the current voice recognition and change the results list accordingly, but this is further disclosed by Robinson (Page 20, line 23 - Page 24, line 5).

It is noted by the examiner that one of ordinary skill in the art would consider "repository of information" to be synonymous with "vocabulary" in the context it is used in Hennecke.

Regarding **claim 9**, Hennecke further discloses a results list that does not include results rejected previously (Page 4, paragraph 0034; Fig. 1, item 8). Robinson further discloses the ability to access and modify the results list at run time (Page 18, line 32 – Page 19, line 4; Page 20, line 23 – Page 21, line 5).

Regarding **claim 10**, Robinson further discloses the capability to retrieve user and historical information and to make changes to the results list based on the user and historical information (Abstract; Page 4, lines 4-6; Page 19, lines 12-15).

Regarding **claim 12**, this claim is very similar to limitations found in **claims 1** and **2**, and is rejected for the same reasons.

Regarding **claim 13**, Hennecke further discloses a second results list formed without including rejected results of a voice recognition transaction (Page 3, paragraph 0028; Page 4, paragraph 0034).

Regarding **claim 14**, Robinson further implies the step of reordering the results list based on information relating to past recognition attempts (Page 18, line 32 – Page 19, line 4).

It is noted by the examiner that one of ordinary skill in the art would consider "reordering" to be included in the capabilities related to a "repository [that] is dynamically accessed and modified" at run time.

Regarding **claim 15**, Robinson further discloses changing of the results list based on information relating to a user engaging in a current voice recognition transaction (Page 20, line 23 – Page 21, line 5).

5.   **Claims 3-7, 11** and **16** rejected under 35 U.S.C. 103(a) as being unpatentable over Hennecke in view of the admitted prior art as applied to **claims 1-2, 8-10,** and **12-15** above, and further in view of US Patent Application 2003/0091028 hereinafter referred to as Chang.

Regarding **claim 3**, Hennecke in view of Robinson teaches all limitations of

claim 2 as above. Robinson additionally suggests the inclusion of contact data to be

accessible (Figure 1; Page 6, lines 27-29), but does not explicitly disclose a likely

contact cache including entries for contacts the user is estimated to be likely to call.

Chang discloses the use of a voice controlled communication system that

includes a list of likely contacts (Page 21, paragraph 0201; Page 24, paragraph 0246).

The references are inherently related because Chang teaches a system requiring

functionality that can be implemented using the teachings of Hennecke in view of

Robinson .

Robinson provides motivation to combine in disclosing the need for custom-

tailoring the voice recognition system to the particular speech patterns of the user to

increase accuracy and reliability with repeated use (Page 12, lines 2-4; Page 12, lines

13-17).

Chang further provides motivation in disclosing the usefulness of a

.communications system that utilizes an Internet protocol network (Page 1, paragraphs

0006 – 0009).

Therefore, the examiner contends that it would have been obvious to one of

ordinary skill in the art at the time the invention was made to implement the teachings of

Chang using the teachings of Hennecke in view of Robinson to implement a voice-

controlled communications system that utilizes an Internet Protocol network and is

customized to the speech patterns of individual users with repeated use.

Regarding **claim 4**, Robinson further implies reordering the results list based on

information relating to past recognition attempts (Page 18, line 32 – Page 19, line 4).

It is noted by the examiner that one of ordinary skill in the art would consider

"reordering" to be included in the capabilities related to a "repository [that] is dynamically

accessed and modified" at run time.

Regarding **claim 5**, Robinson further discloses that the information relating to

past results of recognition attempts includes information relating to a current recognition

transaction (Page 18, line 32 – Page 19, line 4; Page 20, line 23 – Page 21, line 5).

Regarding **claim 6**, Hennecke further discloses a second results list formed

without including rejected results of a voice recognition transaction (Page 3, paragraph

0028; Page 4, paragraph 0034).

Regarding **claim 7**, Robinson further discloses the adaptation of voice

recognition operation based upon parameters from a current voice recognition attempt

(Page 18, line 32 – Page 19, line 4; Page 20, lines 8-16; Page 20, line 22 – Page 21,

line 5).

Regarding **claim 11**, Hennecke in view of Robinson teaches all limitations of **claim 10** as applied above, but does not explicitly disclose a likely contact cache that is updated in response to user voice input.

Chang further discloses a likely contact cache including contacts the user is likely to call (Page 24, paragraph 0201; Page 29, paragraph 0246).

Robinson further implies reordering the results list based on information relating to past recognition attempts (Page 18, line 32 – Page 19, line 4).

It is noted by the examiner that one of ordinary skill in the art would consider "reordering" to be included in the capabilities related to a "repository [that] is dynamically accessed and modified" at run time.

Regarding **claim 16**, this claim is very similar to **claim 11** and is rejected for the same reasons.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Attwater et al. (US Patent 6,629,069) teaches a database that is searched using voice input.

- Franz et al. (US Patent 7,027,987) teaches a system that utilizes voice recognition for input to a search engine.

- Wolf et al. (US Patent Application 2003/0204399) teaches a speech recognition system that dynamically builds a key word database.

- Scarano et al. (US Patent Application 2004/0083099) teaches a method and apparatus to utilize speech recognition in database searching.

- Ahlenius (US Patent Application 2004/0122666) teaches a method and apparatus for displaying speech recognition results.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Kovacek whose telephone number is (571) 270-3135. The examiner can normally be reached on M-F 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Eisen can be reached on (571) 272-7687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alexander Eisen
SPE
Art Unit 2609

DMK 07/05/2007